

MANUFACTURING TECHNOLOGIES, SKILLS CERTIFICATE

Flux-Cored Arc Welding (FCAW) & Gas Tungsten Arc Welding (GTAW)

This Skills Certificate will prepare students to take the American Welding Society (AWS) certified welding (CW) exams. Students will learn various cutting processes and develop manual skills using FCAW, GTAW, and plasma arc cutting (PAC) processes that comply with AWS standards, including critical safety procedures. Students will learn to fabricate simple parts from basic drawings, sketches, and technical plans. Students must pass all coursework with a score of 75% or higher.

Outcomes

Students completing the certificate will:

- Use the FCAW, GTAW, and plasma arc cutting processes to produce a variety of welds.
- Fabricate simple parts from basic drawings, sketches, and technical plans.
- Demonstrate appropriate workplace skills and tools, including the application of personal and mechanical safety measures for using welding equipment and techniques.

Skills Certificates provide training for entry level positions or career advancement and are designed to prepare students to take state, national and/or industry-recognized certifications or licensing exams. Skills certificates are awarded upon completion of coursework and marked on a student’s transcripts at the end of the semester (Student are unable to declare intent to complete a skills certificate.) Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

1. Maintain a minimum cumulative GPA of 2.0
2. Have no financial or library obligation to the college

Code	Title	Units
Certificate Requirements		
WELD 231	Welding III	3
WELD 232	Welding III Practice	2
WELD 241	Welding IV	3
WELD 242	Welding IV Practice	2
Total Units		10
1st semester		Units
WELD 231	Welding III	3
WELD 232	Welding III Practice	2
WELD 241	Welding IV	3
WELD 242	Welding IV Practice	2
Semester Total		10
Total Units		10